March 16, 1880.

Dr. A. Günther, F.R.S., Vice-President, in the Chair.

The Secretary made the following report on the additions to the Society's Menagerie during February 1880:—

The total number of registered additions to the Society's Menagerie during the month of February was 102, of which 14 were by birth, 37 by presentation, 42 by purchase, and 9 on deposit. The total number of departures during the same period, by death and removal, was 75.

The most noticeable additions during the month were:—

1. Two female Thars (*Capra jemlaica*), mother and young, presented by H.R.H. the Prince of Wales on the 5th February, 1880. The mother is the same animal that was brought home by the Prince of Wales on his return from India in 1876, and was deposited for some time in the Society's Gardens[1]. The young female was born whilst the mother was in the Society's Gardens. The male, which arrived at the same time, is unfortunately dead; so that another male of this species would be a very desirable acquisition to the Society's Menagerie.

2. Two Burrhel Wild Sheep (*Ovis burrhel*), purchased February 19th, being the first examples of this fine Himalayan Sheep that have been acquired by the Society.

Mr. W. K. Parker exhibited the eggs and embryos of some Crocodiles (*Crocodilus palustris*) obtained in Ceylon by Dr. W. R. Kynsey, Principal Medical Officer of Colombo, and kindly placed at Mr. Parker's disposal for embryological investigations by Sir Joseph Fayrer, F.Z.S. Mr. Parker read the following notes on the breeding of this Crocodile by S. Waytialingam, the native Assistant at the Civil Hospital, who had formed the collection:—

"13th September, 1879.

"I have been giving my close attention for the last two months to the eggs of Crocodiles. I find they commence to lay eggs in the months of June, July, and August, particularly in the former two months. They do not lay in muddy places, but always select sandy soil. They go far from the embankments of the tanks or pools in which they live in search of such suitable soils; and I have seen places where they have laid eggs at distances of from a quarter to half a mile from their water-places, where they live in holes made for themselves for the time being.

"They always try, if possible, to secure a part of the jungle unfrequented either by men or cattle.

"They make, first, a large hole for themselves to live in during the day in order to watch their eggs, and then make a small hole near and sometimes at the very mouth of the previous one, and lay the

[1] See P. Z. S. 1876, p. 464.

eggs in layers, one over the other, very nicely arranged in a circular form. They throw a very thin and loose covering of sand over them to the depth of about 12 or 13 inches, and then make a small heap of sand over the place.

"Very much like the Iguanas, Crocodiles also seem to lay all their eggs (between twenty and thirty in number) at the same time, and never disturb the nest until the hatching-time is finished, which lasts nearly ten weeks.

"They generally watch the eggs during the day, remaining in the hole made for themselves, and go at night in search of food. On cloudy and rainy days they are frequently seen upon the eggs, perhaps to warm them, but at other times move about the place or remain in the hole.

"All these actions are performed by the females; the males are never seen about the nesting-place.

"They do not allow anybody to go near the eggs; they make a fearful roaring noise, and attempt to attack people who go near. They keep a very strict watch, and very seldom or never quit the place during the day; but the wild Jackal (a sagacious brute) watches them carefully, and sometimes gets at the eggs in the absence of the mother.

"It is very difficult to find out the spot where the eggs are laid by Crocodiles, although they usually lay near the hole in which they live.

"The mother, who watches the place where the eggs are laid, never interferes with the nest, but carefully and attentively waits until the young are hatched, and then takes them into her large hole and under her protection, where they remain under her care for some time."

Mr. Edward R. Alston exhibited a coloured drawing of an adolescent specimen of *Tapirus dowi* in the Paris Museum, for which he was indebted to the kindness of Prof. A. Milne-Edwards. This individual, which was of an almost uniform dark-brown colour, had been obtained by Mr. Carmiol on the Atlantic coast of Costa Rica, thus negativing Mr. Alston's former suggestion that Dow's Tapir might prove to be confined to the Pacific slopes of Central America[1]. The British Museum has lately received a skeleton of *T. bairdi* from the same district, proving that the two forms are found together, at least in some localities.

Mr. Alston also exhibited a specimen of a remarkable and little-known Australian Marsupial, *Antechinomys lanigera* (Gd.), belonging to the Museum of the University of Cambridge, remarking that Mr. Gould's original illustration[2] was so misleading, and Mr. Krefft's generic characters[3] so insufficient, that it was only by a reference to

[1] P. Z. S. 1879, p. 666.

[2] Mamm. of Austr. i. pl. xxxiii.

[3] P. Z. S. 1866, p. 434.

the type specimen in the British Museum that he had been able to identify the form. He hoped to be able ere long to give a full account of its structure.

Mr. W. A. Forbes, F.Z.S., Prosector to the Society, read a description of the male generative organs of the Sumatran Rhinoceros (*Rhinoceros sumatrensis*), as observed in an adult male specimen which died in the Society's Gardens in 1879.

This paper will be published in the Society's 'Transactions.'

Mr. W. K. Parker read the following abstract of a memoir on the structure of the skull in the Chameleons:—

"I have worked out the skull in the adult and newly-hatched young of *Chamæleo vulgaris* and in the adult of *C. pumilus*. The results satisfy me that the Chameleons are a very isolated group, far further removed from the ordinary Lacertilia than even the New-Zealand *Hatteria* (or *Sphenodon*).

"Their skull is extremely ornate, and greatly developed upwards and behind by the breaking up of the parietal region into three bones, the middle piece becoming the large arched crest.

"They have no '*epipterygoideau columella*,' only one vomer, an abortively developed single premaxillary, an arrested auditory apparatus, with no drum-cavity, no cochlea, and no fenestra rotunda. The basihyal is as long as the skull and highly ossified; the teeth are all ankylosed to the upper and lower jaws. These, and many other things, show that these Lizards require to be kept at a great distance (zoologically) from all the other groups.

"By comparing the skulls of the new-born Chameleon, of the adult of the Dwarf Chameleon, and of the adult of the Common Chameleon with those of other Lizards, especially of the *typical* genus *Lacerta*, I have been able to understand the modifications that have taken place in this most extraordinary type, in the skull of which I have counted *as many as twenty-five* modifications of structure as compared with what is normal in the Lacertilia.

"A species of Iguanoid from Mexico, viz. *Læmanotus longipes*, has a very small and greatly crested skull, which gives this Lizard a very Chameleonoid appearance. This skull, with that of the less-modified Dwarf Chameleon, has helped me greatly.

"The skull of the newly hatched young of the typical Chameleon comes very near that of the young of any other kind of Lizard in the condition of its roof-bones—the parts that become so transformed afterwards; and in passing from it to the skull of the adult, I have been glad to lay down any stepping-stones I could find.

"At some future time I hope to give the morphology of the skull in *Læmanotus* and in *Hatteria*."

This paper will be published entire in the Society's 'Transactions.'

The following papers were read:—